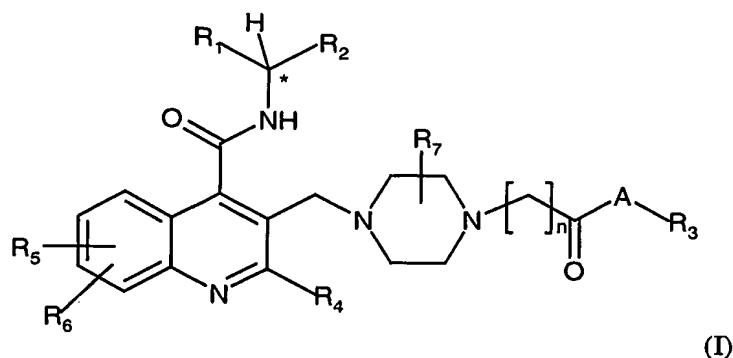


What is claimed is:

1. A compound of formula (I)



(I)

wherein:

R₁ is H or substituted or unsubstituted (C₁₋₆)alkyl;

R₂ is substituted or unsubstituted aryl, (C₃₋₇)cycloalkyl, or heterocycle;

R₃ is H or substituted or unsubstituted (C₁₋₆)alkyl, (C₃₋₇)cycloalkyl, aryl or heterocycle;

A is NR₈ or O;

R₈ is H or substituted or unsubstituted (C₁₋₆)alkyl;

R₄ is substituted or unsubstituted heterocycle;

R₅ is H or up to three substituents independently selected from the list consisting of alkyl, alkenyl, aryl, alkoxy, or a hydroxylated derivative thereof, hydroxy, halogen, nitro, cyano, carboxy, alkylcarboxy, alkylcarboxyalkyl, haloalkyl, amino or mono- or dialkylamino; or R₅ represents a bridging moiety which is arranged to bridge two adjacent ring atoms, wherein the bridging moiety comprises alkyl or dioxyalkylene;

R₆ is H or halo;

R₇ is oxo;

n is 1 to 4; or a pharmaceutically acceptable salt thereof.

5

2. A compound according to claim 1 wherein R₁ is methyl.

3. A compound according to claim 1 wherein R₂ is substituted or unsubstituted phenyl or cyclohexyl.

10

4. A compound according to claim 1 wherein R₃ is methyl or substituted or unsubstituted morpholino, piperazine, pyrrole, piperidine, thiophene, imidazole, or pyrazole.

15

5. A compound according to claim 1 wherein R₈ is H or methyl.

6. A compound according to claim 1 wherein R₄ is substituted or unsubstituted 2-thienyl or 3-thienyl.

20

7. A compound according to claim 1 wherein R₅ is H or fluoro.

8. A compound according to claim 1 wherein R₆ is H or fluoro.

9. A compound according to claim 1 which is:

25

3-(4-Dimethylcarbamoylmethyl-3-oxo-piperazin-1-ylmethyl)-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

3-[4-(2-Morpholin-4-yl-2-oxo-ethyl)-3-oxo-piperazin-1-ylmethyl)-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

30

3-[3-Oxo-4-(2-oxo-2-piperazin-1-yl-ethyl)-piperazin-1-ylmethyl)-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

3-(4-Carbamoylmethyl-3-oxo-piperazin-1-ylmethyl)-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

- 5 3-{4-[2-(4-Methyl-piperazin-1-yl)-2-oxo-ethyl]-3-oxo-piperazin-1-ylmethyl}-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

3-[3-Oxo-4-(2-oxo-piperidin-1-yl-ethyl)-piperazin-1-ylmethyl]-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

- 10 3-[3-Oxo-4-(2-oxo-pyrrolidin-1-yl-ethyl)-piperazin-1-ylmethyl]-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

- 15 3-[4-(3-Morpholin-4-yl-3-oxo-propyl)-3-oxo-piperazin-1-ylmethyl]-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

3-[4-(2-Morpholin-4-yl-2-oxo-ethyl)-2-oxo-piperazin-1-ylmethyl]-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

- 20 3-(4-Dimethylcarbamoylmethyl-2-oxo-piperazin-1-ylmethyl)-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

6-Fluoro-3-[4-(2-morpholin-4-yl-2-oxo-ethyl)-3-oxo-piperazin-1-ylmethyl]-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

- 25 6-Fluoro-3-[3-oxo-4-(2-oxo-2-pyrrolidin-1-yl-ethyl)-piperazin-1-ylmethyl]-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

- 30 3-{4-[2-((R)-2-Hydroxymethyl-pyrrolidin-1-yl)-2-oxo-ethyl]-3-oxo-piperazin-1-ylmethyl}-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

3-(4-{[(2,5-Dimethyl-2H-pyrazol-3-ylmethyl)-carbamoyl]-methyl}-3-oxo-piperazin-1-ylmethyl)-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

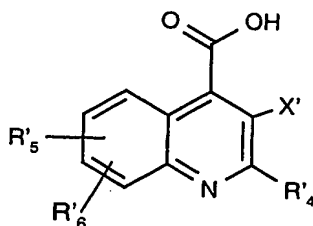
5

3-(4-{[(5-Methyl-1H-imidazol-2-ylmethyl)-carbamoyl]-methyl}-3-oxo-piperazin-1-ylmethyl)-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide, and

10 3-{4-[(Methyl-thiophen-2-ylmethyl)-carbamoyl]-methyl}-3-oxo-piperazin-1-ylmethyl)-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide, or a pharmaceutically acceptable salt thereof.

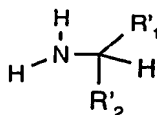
10. A process for the preparation of a compound of formula (I) according to claim 1 or a salt thereof and/or a solvate thereof, which process comprises reacting a

15 compound of formula (II) or an active derivative thereof:



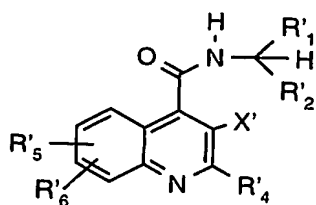
(II)

20 wherein R'4, R'5, R'6 and X' are R4, R5, R6 and X respectively as hereinbefore defined in relation to formula (I) or a group convertible to R4, R5, R6 and X respectively; with a compound of formula (III):



(III)

wherein R'₁ and R'₂, are R₁ and R₂ as defined for formula (I) or a group or atom convertible to R₁ and R₂ respectively; to form a compound of formula (Ic):



(Ic)

- 5 wherein R'₁, R'₂, X', R'₄, R'₅ and R'₆ are as defined above, and thereafter carrying out one or more of the following optional steps:
- (i) converting any one of R'₁, R'₂, X', R'₄, R'₅ and R'₆ to R₁, R₂, X, R₄, R₅ and R₆ respectively as required, to obtain a compound of formula (I);
 - (ii) converting a compound of formula (I) into another compound of formula (I);
- 10 and
- (iii) preparing a salt of the compound of formula (I) and/or a solvate thereof.
11. A pharmaceutical composition which comprises a compound according to claim 1 and a pharmaceutically acceptable carrier.
- 15 12. A method of treating respiratory diseases in mammals, which comprises administering an effective amount of a compound according to claim 1.